Cryptologic Technician - Technical (CTT)

July 2021

Introducing

OARS
OCCUPATIONAL ADVANCEMENT REQUIREMENT STANDARDS

LaDR
NAVY LEARNING and DEVELOPMENT ROADMAP

MyNAVYHR
Serving Sailors 24/7

United States Navy Ethos

We are the United States Navy, our Nation's sea power - ready guardians of peace, victorious in war.

We are professional Sailors and Civilians - a diverse and agile force exemplifying the highest standards of service to our Nation, at home and abroad, at sea and ashore.

Integrity is the foundation of our conduct; respect for others is fundamental to our character; decisive leadership is crucial to our success.

We are a team, disciplined and well-prepared, committed to mission accomplishment. We do not waver in our dedication and accountability to our Shipmates and families.

We are patriots, forged by the Navy's core values of Honor, Courage and Commitment. In times of war and peace, our actions reflect our proud heritage and tradition.

We defend our Nation and prevail in the face of adversity with strength, determination, and dignity.

We are the United States Navy.

The Sailor's Creed

I am a United States Sailor.

I will support and defend the Constitution of the United States of America and I will
obey the orders of those appointed over me.

I represent the fighting spirit of the Navy and those who have gone before me to defend
freedom and democracy around the world.

I proudly serve my country's Navy combat team with Honor, Courage, and Commitment.

I am committed to excellence and the fair treatment of all.

CAREER ROADMAP

Seaman Recruit to Master Chief Roadmap

The educational roadmap below will assist Sailors in the Cryptologic Technician - Technical community through the process of pursuing professional development and advanced education using various military and civilian resources e.g. PQS program; JST Joint Service Transcript; E-Learning; Navy College Network; etc. Successful leadership is the key to military readiness and will always require a high degree of technical skill, professional knowledge, and intellectual development.

What is a Career Roadmap for Cryptologic Technician - Technical?

Cryptologic Technician - Technical roadmaps are just what the name implies - a roadmap through the Enlisted Learning and Development Continuum from Seaman Recruit through Master Chief. The principal focus is to standardize a program Navy wide by featuring the existing skills necessary to be successful in the Navy. The ultimate goal of a roadmap is to produce a functional and competent Sailor.

What is the Enlisted Learning and Development Continuum?

Enlisted Learning and Development Continuum is the formal title given to the curriculum and process building on the foundation of Sailorization beginning in our Delayed Entry Program through Recruit Training Command and throughout your entire career. The continuum combines skill training, professional education, well-rounded assignments, and voluntary education. As you progress through your career, early-on skill training diminishes while professional military education gradually increases. Experience is the ever-present constant determining the rate at which a Sailor trades skill training for professional development.

Do Sailors have to follow the Roadmap?

Yes. The Cryptologic Technician - Technical roadmap includes the four areas encompassed by the Continuum in Professional Military Education to include; Navy Professional Military Education (NPME), Joint Professional Military Education (JPME), Leadership and Advanced Education.

Some training and education is mandatory (Recruit Training, Cryptologic Technician-Technical "A" School at the Cryptologic Technician-Technical, E-Learning, etc.). Some may be directed by your chain of command (Microsoft Excel and PowerPoint courses), and the remainder is voluntary (MNP, E-Learning, college courses, etc.). Sailors are advised to seek out mentors, including your Command Master Chief, Senior Enlisted Advisor, Leading Chief Petty Officer, Leading Petty Officer and Command Career Counselor, and to make use of your Navy College Virtual Education Center (VEC) or OCONUS Education Office's vast resources. All are uniquely qualified to help you along the way.

Notes:

Cryptologic Technician Technical (CTT). CTTs perform a variety of technically-intensive duties, both afloat and ashore, associated with processing and interpreting RADAR emissions for tactical and strategic value. They operate Electronic Intelligence (ELINT)/Electronic Support (ES) receiving/processing systems and peripheral equipment to provide threat assessments, situational awareness and Indications and Warnings (I&W) in addition to formulating Electronic Attack (EA) techniques and tactics. Additionally, CTTs record and analyze RADAR data to develop and maintain RADAR libraries for strategic analysis and development of deception techniques. They operate and maintain ES and EA systems permanently installed on ships. CTTs perform their duties on ships, submarines, aircraft, patrol craft and at shore commands in the U.S. and overseas. CTTs also augment U.S. Special Operations Forces and Expeditionary Warfare forces abroad.

YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO ADVANCE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/ SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
26-30	CTTCM	23.2 Yrs	CSEL	36	Sea or Shore Tour Billet: Staff Duty, ECM, CSEL. Duty: OPNAV, BUPERS, FFC, CPF, CNSWC, PEO, TYCOM, NIWDC, CID, NIOC, Numbered Fleet.
23-26	CTTCM CTTCS	23.2 Yrs 20.4	CSEL, CWO	36	Sea or Shore Tour Billet: Dept LCPO, Staff Duty, CSEL, ECM, Senior Detailer. Duty: OPNAV, BUPERS, FFC, CPF, CNSWC, PEO, TYCOM, NIWDC, CID, NIOC, Numbered Fleet, Aircrew
20-23	CTTCM CTTCS CTTC	23.2 Yrs 20.4 14.3	CSEL, CWO	36	5th Sea Tour/4th Shore Tour Billet: Dept LCPO, LCPO Afloat, Staff Duty, Detailer. Duty: Ship, Submarine, Aircrew, NIOC, NIWTG, CID, ATG, RTC, NSW, NPC, CPF, Numbered Fleet. Qualification: Senior Enlisted Academy, IOWO, CICWO (CVN), Shipboard SWC, AWC. NEC C05A.
16-20	CTTCS CTTC CTT1	20.4 Yrs 14.3 7.5	LDO, CWO, OCS, MECP, CSEL	36	4th Sea Tour/3rd Shore Tour Billet: Dept LCPO, LCPO Afloat, Staff Duty, Detailer. Duty: Ship, Submarine, Aircrew, NIOC, NIWTG, CID, ATG, RTC, NSW, NPC, CPF, Numbered Fleet. Qualification: Senior Enlisted Academy, IOWO, CICWO (CVN), Shipboard SWC, AWC. NEC C05A.

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YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO ADVANCE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/ SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
12-16	CTTCS CTTC CTT1	20.4 Yrs 14.3 7.5	LDO, CWO, OCS, MECP, CSEL	36	2nd Shore Tour/3rd Sea Tour Billet: LCPO Afloat or Ashore, Department LCPO, Afloat Staff, Instructor, DIRSUP Supervisor, TIO Analyst or Operator, Detailer. Duty: Ship, Submarine, Aircrew, NIOC, NIWTG, ATG, RTC, NRD, CID, NSW, CID, NPC. Qualification: Warfare Qualifications, MTS, IOWO , CICWO (CVN), Shipboard SWC, AWC. NEC C05A.
8-12	CTTC CTT1 CTT2	14.3 Yrs 7.5 3.0	LDO, CWO, OCS, MECP, CSEL	Operator-36. Maintainer-36.	2nd Sea Tour/2nd Shore Tour Billet: LPO afloat, LCPO Afloat, Afloat Staff, Instructor, DIRSUP Operator and/or Supervisor, TIO Operator/Analyst. National Systems, TECHELINT. Duty: Ship, Submarine, Aircrew, NIOC, NIWTG, ATG, RTC, NRD, CID, NSW. Qualifications: ASST IOWO, EW Supervisor, Air Warfare Coordinator, Ship's Weapons Coordinator, MTS, Warfare qualifications. NEC's C17A, C07A, C05A, C06A .
4-8	CTT1 CTT2 CTT3	7.5 Yrs 3.0 1.9	STA-21, OCS, MECP MESAP (NEC C22A) and MOSAP (NEC C09A) internships.	36	1st Shore Tour/2nd Sea Tour Billet: EW Systems operator and/or maintainer. EW Journeyman, EW Supervisor. DIRSUP submarines operator and/or supervisor. National Systems Operator, TECHELINT Analyst. TIO Operator/Analyst. Duty: Ship, Submarine, Aircrew, NIOC, NIWTG, ATG, CID, NSW. Qualification: EW Operator, EW Supervisor, National Systems Analyst/Supervisor, Warfare Qualifications. ASST IOWO, NEC's C07A, C17A, 5306/5307, C01A, C00A, C02A, C03A, C04A, C06A, C15A.

YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO ADVANCE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/ SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
1-4	CTT2￼CTT3	3.0 Yrs￼1.9	STA-21, Naval Academy, NROTC, OCS,	Operator– 42.￼Maintainer- 48.	1st Sea Tour￼Billet: Fleet EW Systems Operator and/or Maintainer, DIRSUP submarines operator, Aircrew, ELINT analyst.￼Duty: Ship, NIOC, Submarine, Aircrew.￼Qualification: EW Operator, EW Supervisor, Submarine Systems operator, Aircrew, National Systems Analyst, Warfare Qualifications. ASST IOWO, NEC C15A, C06A, C07A, C01A, C00A, C02A, C03A, C04A.

Notes:

1. "A" School required.

2. Sea/Shore Flow for CTTs is 36/36 with the following exceptions: Sailors in the 6YO Advanced Electronics Field, a maintenance technician's initial sea tour will be 48 months. All other CTTs will complete a 42-month initial sea tour. Initial sea tours for Naval Special Warfare (NSW)-Tactical Information Operations (TIO) are 5 years with a potential 3 year NSW shore duty follow-on tour. In addition, anyone selected for Military ELINT Signals Analyst Program (MESAP) or Military OPELINT Signals Analyst Program (MOSAP) internships are required to fulfill a three-year payback tour upon completion of their internship. MESAP graduates should expect to be assigned to an NSA Shore site in a C22A billet. MOSAP graduates should expect to be assigned to an appropriate C09A billet. Following the payback tour, they are eligible and expected to return to their regular sea/shore rotation.

3. When discussing career enhancing milestones and tours, it is important to understand the effects of the 2003 CTT/EW merger. Prior to the merger, CTTs specialized in both OPELINT and TECHELINT areas, the merger resulted in three distinct areas of focus (adding EW), and today's CTT has the additional opportunity to augment Special Operations Forces. The rating as a whole benefits from both the CTTs that are diverse and understand all missions of the rating, but also those that are specialized in just one or two areas. Sustained superior performance has always been the key to success, the CTT that is selected for advancement should be the one that has consistently broken out, whether assigned to surface ships, submarines, aircraft, special forces, as an operator, analyst, technician, or maintainer.

4. At the Apprentice and Journeyman levels CTTs are assessed as operators, operator/maintainers, or analysts. No two CTTs will follow identical career patterns; however, on the average, the successful CTT will meet most of the career milestones illustrated in Career Path Continuum in the sequence indicated.

5. TIO billets are sea duty billets that augment Special Operations Command in support of Navy SEAL teams, Special Boat Teams, and other Special Mission Units. This duty is extremely demanding and leadership opportunities may be limited due to the independent nature of the duties assigned. Due to specific training and operational requirements, some CTTs will remain assigned to this functional area based on their technical expertise and corporate knowledge. This is usually a five-year minimum obligation.

6. Air/Subsurface Direct Support billets are sea duty billets that augment aircraft/submarines in support of Fleet and CNO directed special operations. This duty is considered arduous and extremely challenging; some CTTs will remain confined to this functional area based on their technical expertise and corporate knowledge and multiple tours should not be viewed negatively.

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7. Consideration should be given to CTT's who demonstrate rating involvement through participation in important rating modernization functions, including Occupational Standards Review, PQS Development, Navy Tactical Techniques and Procedures revisions, Naval Warfare Publication revisions, Joint Publication revisions, Advancement Exam Readiness Review, Course Curriculum Development and Training Readiness Reviews.

Considerations for advancement from E6 to E7

1. Sea Assignments

    a.   PCS Afloat
- LPO with mission and leadership impact
- EW Supervisor qualified with operational impact
- Combat Systems Training Team (CSTT) and or other training team member with documented impact (Sailors led/trained, events executed, etc.)
- Information Operations Watch Officer (IOWO) qualified should be considered a plus
- Enlisted Warfare Qualifications are expected when available
- 3M Assistant qualified
- Active First Class Petty Officer Association (FCPOA) member
- SAILOR 360 involvement
- Command Collateral with documented impact

    b.   Direct Support Subs or Surface
- LPO with mission and leadership impact
- Electronic Support Measure (ESM) Supervisor (POS 8) qualified **(Subs only)**
- Qualified National OPELINT Analyst/Battle Force ELINT Analyst or IOWO with operational impact **(Surface only)**
- Performance Information Memorandum (PIM) or Evaluation documents successful team integration with Ship's company
- Documented deployment time
- Enlisted Warfare Qualifications are expected when available
- Active FCPOA member
- SAILOR 360 involvement
- Command Collateral with documented impact

    c.   Aircrew
- LPO with mission and leadership impact
- Aircrew Training Continuum (ACTC) Level 400 Instructor with successful deployment showing ability to lead/train
- Documented deployment time
- Enlisted Warfare Qualifications are expected when available
- Active FCPOA member
- SAILOR 360 involvement
- Command Collateral with documented impact

    d.   Naval Special Warfare (TIO)
- Documented technical acumen and leadership
- Documented deployment time
- Enlisted Warfare Qualifications are expected when available
- Active FCPOA Member
- SAILOR 360 involvement

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2. Shore Assignments (all)

    a. Consider positions in which enlisted leaders develop subordinates and mentor them in proper career progression with emphasis on continuing technical development, leadership development and Sailorization. Also consider positions in which impact on Fleet readiness is demonstrated.

    b. Shore duty billets are primarily at Naval Information Warfare Training Group (NIWTG), Afloat Training Group (ATG), Information Warfare Training Command (IWTC) Learning Centers, Navy Information Operations Command (NIOC) Fleet Information Operations Center (FIOC), Regional Maintenance Center (RMC), Commander, Operational Test and Evaluation Force (COTF), Naval Special Warfare (NSW), and Staff commands.

- Should show strong documented leadership while serving as LPO, NCOIC, Instructor, Mission Supervisor or leading watch teams/sections
- Should show strong documented technical knowledge in assigned billet
- Should show documented instructional time if in an instructor billet
- Demonstrated operational and/or command-wide impact
- Demonstrated impact on Fleet readiness
- Master Training Specialist/Afloat Training Specialist (MTS/ATS) and Enlisted Warfare Qualifications are expected when available at commands. CTTs serving in a National Cryptologic School (NCS) billet should qualify Adjunct Faculty or Faculty Certification
- Active FCPOA Member
- SAILOR 360 involvement
- Command or Asst. Collateral duty with documented impact

Considerations for advancement from E7 to E8

1. Sea Assignments

    a. PCS Afloat

- LCPO with mission and leadership impact
- Should be qualified OOD (in-port) and other station outside the normal scope (ie: Anti-terrorism Watch Officer)
- Surface Warfare Coordinator and/or Air Warfare Coordinator qualified and or IOWO qualified with operational impact
- CSTT and or other training team member with documented impact (Sailors led/trained, events executed, etc.)
- Enlisted Warfare Qualifications are expected when available
- CPOA involvement (leadership roles in CPOA should be considered a plus)
- Sailor 360 involvement (leading a committee should be considered a plus)
- Command Collateral with documented impact

    b. Direct Support Subs or Surface (Information Operations Planner)

- LCPO with mission and leadership impact
- ESM Supervisor (POS 8) qualified with mission impact as a Chief **(Subs only)**
- Qualified IOWO with operational impact **(Surface only)**
- PIM or Evaluation documents successful team integration with Ship's company
- Documented deployment time
- Enlisted Warfare Qualifications are expected when available
- CPOA involvement (leadership roles in CPOA should be considered a plus)
- Sailor 360 involvement (leading a committee should be considered a plus)
- Command Collateral with documented impact

    c. Aircrew

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- LCPO with mission and leadership impact
- ACTC Level 400 Instructor with successful deployment showing ability to lead/train
- ACTC 500 Weapons and Tactics Instructor is highly regarded for the entire Aircrew community
- Documented deployment time
- Enlisted Warfare Qualifications are expected when available
- CPOA involvement (leadership roles in CPOA should be considered a plus)
- Sailor 360 involvement (leading a committee should be considered a plus)
- Command Collateral with documented impact

    d. Naval Special Warfare (TIO)
- Documented technical acumen and leadership
- Documented deployment time
- Enlisted Warfare Qualifications are expected when available
- CPOA involvement (leadership roles in CPOA should be considered a plus)
- Sailor 360 involvement (leading a committee should be considered a plus)

2. Shore Assignments: (all)

    a. Consider positions in which enlisted leaders develop subordinates and mentor them in proper career progression with emphasis on continuing technical development, leadership development and Sailorization. Also consider positions in which impact on Fleet readiness is demonstrated.

    b. Shore duty billets are primarily at NIWTG, ATG, NPC, IWTC Learning Centers, NIOCs, FIOCs, RMCs, COTF, NSW, and Staff commands.
- Should show strong documented leadership while serving as LCPO, NCOIC, Instructor, Mission Supervisor or leading watch teams/sections
- Should show strong documented technical knowledge in assigned billet
- Should show documented instructional time if in an instructor billet
- Demonstrated operational and/or command-wide impact
- Demonstrated impact on Fleet readiness
- MTS/ATS and Enlisted Warfare Qualifications are expected when available at commands. CTTs serving in a NCS billet should qualify Adjunct Faculty or Faculty Certification
- CPOA involvement (leadership roles in CPOA should be considered a plus)
- Sailor 360 involvement (leading a committee should be considered a plus)
- Command Collateral duty with documented impact

Considerations for advancement from E8 to E9
1. Sea Assignments

    a. PCS Afloat
- CVN LCPO with mission and leadership impact
- CVN Combat Direction Center Watch Officer qualified and/or IOWO qualified with operational impact
- CSTT and or other training team member with documented impact (Sailors led/trained, events executed, etc.)
- Enlisted Warfare Qualifications are expected when available
- CPOA involvement (leadership roles in CPOA should be considered a plus)
- Sailor 360 involvement (leading a committee should be considered a plus); high emphasis on chairing or co-chairing SAILOR 360
- Command Collateral with documented impact

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    b.   CCSG Staff

- LCPO and Surface Electronic Warfare Officer/Asst. Electronic Warfare Officer with Strike group-wide mission and leadership impact
- IOWO qualified with operational impact
- Enlisted Warfare Qualifications are expected when available
- CPOA involvement (leadership roles in CPOA should be considered a plus)
- Sailor 360 involvement (leading a committee should be considered a plus); high emphasis on chairing or co-chairing SAILOR 360
- Command Collateral with documented impact

    c.   Naval Special Warfare (TIO)

- Documented technical acumen and leadership
- Documented deployment time
- Enlisted Warfare Qualifications are expected when available
- CPOA involvement (leadership roles in CPOA should be considered a plus)
- Sailor 360 involvement (leading a committee should be considered a plus)

2.   Shore Assignments (all)

    a.   Consider positions in which enlisted leaders develop subordinates and mentor them in proper career progression with emphasis on continuing technical development, leadership development and Sailorization. Also consider positions in which impact on Fleet readiness is demonstrated.

    b.   Shore duty billets are primarily at NIWTG, ATG, NPC, IWTC Learning Centers, NIOCs, FIOCs, NSW, and Staff commands.

- Should show strong documented leadership while serving as LCPO, NCOIC, Instructor, Mission Supervisor or leading watch teams/sections
- Should show strong documented technical knowledge in assigned billet.
- Demonstrated operational and/or command-wide impact
- Should show documented instructional time if in an instructor billet
- Demonstrated impact on Fleet readiness
- MTS/ATS and Enlisted Warfare Qualifications are expected when available at commands. CTTs serving in a NCS billet should qualify Adjunct Faculty or Faculty Certification
- CPOA involvement (leadership roles in CPOA should be considered a plus)
- Sailor 360 involvement (leading a committee should be considered a plus)
- Command Collateral duty with documented impact

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Cryptologic Technician Technical (CTT). Similar to the Active Duty component, Reserve CTTs perform a variety of technical duties, both afloat and ashore, associated with processing and interpreting RADAR emissions for tactical and strategic value. They operate Electronic Intelligence (ELINT)/Electronic Support (ES) receiving/processing systems and peripheral equipment to provide threat assessments, situational awareness and Indications and Warnings (I&W) and formulate Electronic Attack (EA) techniques and tactics. In addition, CTTs record and analyze RADAR data to develop and maintain RADAR libraries for strategic analysis and development of deception techniques. Reserve CTTs primarily perform their duties at shore commands in the U.S. and overseas, but can also perform their duties on ships, submarines, aircraft, and patrol craft where they operate and maintain ES and EA systems. For mobilizations, CTTs regularly augment U.S. Special Operations and Expeditionary Warfare Forces abroad, as well as serving at CONUS and OCONUS Cryptologic Centers.

YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/ SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
26-30	CTTCM	18.5 Yrs	CMDCM	N/A	Regional Staff, National Staff, CMDCM Billet Billets: Regional SEL, Rating Advisor, Regional Career Information Program Manager, NAT Coordinator, CMC (NEC 8CMC) Qualifications: EIWS, SEA, CMC (NEC 8CMC)
23-26	CTTCM CTTCS	18.5 Yrs 16.7	LDO, CWO. DIRCOM, CMC, CSC, SEL	N/A	Regional Staff, National Staff, CMDCM Billet Billets: Regional SEL, Rating Advisor, Regional Career Information Program Manager, NAT Coordinator, CMC/CSC (NEC 8CMC /NEC 8CSC), 4th MOB (3rd - 4th for Prior Service) Qualifications: CMC (NEC 8CMC)
20-23	CTTCM CTTCS CTTC	18.5 Yrs 16.7 12.2	LDO, CWO, OCS, DIRCOM, CMC, CSC, SEL	N/A	Regional Staff, National Staff, CMDCM Billet Billets: Regional SEL, Rating Advisor, Regional Career Information Program Manager, NAT Coordinator, CMC/CSC (NEC 8CMC /NEC 8CSC), 3rd or 4th MOB (2nd or 3rd for Prior Service) Qualifications: CMC/CSC (NEC 8CMC /NEC 8CSC),

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16-20	CTTCS CTTC CTT1	16.7 Yrs 12.2 8.1	LDO, CWO, OCS, DIRCOM, CSC, SEL	N/A	Regional Staff, National Staff, Unit Level Leadership (Any IW Unit) Billets: Regional SEL, Rating Advisor, National or Regional Career Information Program Manager, Training LCPO or NAT Coordinator, CSC/NEC 9578 (SCPO), Unit LCPO, Division LCPO, Unit LPO, Division LPO, 3rd MOB (2nd for Prior Service) Qualifications: IO PLANNER, SEA
12-16	CTTCS CTTC CTT1	16.7 Yrs 12.2 8.1	LDO, CWO, OCS, DIRCOM, RC2AC	N/A	1st Tour Regional Staff, National Staff or 1st/2nd Tour Unit Level Leadership position (Any IW Unit) Billets: Rating Advisor, National or Regional Career Information Program Manager, Training LCPO or NAT Coordinator, Unit LCPO, Division LCPO, Unit LPO, Division LPO Qualifications: IO PLANNER, SEA
8-12	CTTC CTT1 CTT2	12.2 Yrs 8.1 4.2	LDO, OCS, DIRCOM, RC2AC	N/A	1st/2nd Tour Unit Level Leadership position. Billets: Unit LCPO, Division LCPO, Unit LPO, Division LPO Duty: CPF Unit, NIOC, ONI, SEAL TEAM, HSM or UAV Unit, 2nd MOB (1st for Prior Service) Qualifications: C06A, C07A, EIWS
4-8	CTT1 CTT2 CTT3	8.1 Yrs 4.2 3.2	STA-21, OCS, DIRCOM, RC2AC	N/A	Unit LPO, Division LPO Billets: ELINT Analyst Duty: CPF Unit, NIOC, ONI, SEAL TEAM, HSM or UAV Unit, 2nd MOB (1st for Prior Service) Qualifications: C06A, C07A, EIWS
1-4	CTT2 CTT3	4.2 Yrs 3.2	Naval Academy, NROTC, DIRCOM, OCS, RC2AC	N/A	Billets: ELINT Analyst Duty: CPF Unit, NIOC, ONI, SEAL TEAM, HSM or UAV Unit, 1st MOB (for Non-Prior Service) Qualifications: C06A, C07A, EIWS

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CTT CAREER PATH
SELECTED RESERVE (SELRES)

Notes:

1. "A" School is required for this rating.

2. This is not a compressed rating.

3. Cross-assignment to an Information Warfare Community (IWC) billet at any paygrade may be required due to geographic limitations based on a Sailor's home of record. However, Sailors should make every effort to seek career diversity or diversity in billet assignments.

4. While traditionally most CTT billets reside within the NIOC/NSA realm, assignment to other IW units such as CPF, DIA, ONI, HSM units are areas CTT's can broaden their knowledge base. Assignment to Expeditionary units such as SPECWAR, NEIC or a UAV unit are career enhancing and broaden the Sailor's knowledge of their rate and the joint warfighting environment at any paygrade.

5. EIWS and other warfare qualifications should be viewed as a noteworthy achievement by Selection Boards. Only Sailors assigned or mobilized to units under Operational Commands with an approved program have an opportunity to qualify, but this requires the Sailor to take the initiative. Refer to COMNAVIFOR INSTRUCTION 1414.1A for information related to the EIWS program.

6. Rating NECs: C00A - AN/SLQ-32A/B (V) 2 Technician
   C02A - Electronic Warfare Systems Technician (AN/SLQ-32(V)3)
   C04A - AN/SLQ-32(V)6 Electronic Warfare Systems Maintenance Technician
   C05A - Electronic Warfare Technician (Advanced Application)
   C06A - Airborne Cryptologic Technician Operator/Analyst
   C07A - National OPELINT Analyst
   C15A - Subsurface Augmentee ELINT Operator
   C17A - Intermediate Technical ELINT (TECHELINT) Analysis Technician
   771B - Naval Special Warfare (NSW) Tactical Information Operations (TIO) Operator

7. Recommended Skill Training should be conducted in order to measure the sailor's proficiency and the health of the CTT community:
   Surface EW Threat Recognition – A-233-0005 – 10 Days
   Surface EW Operations (Journeyman) – K-221-0176 – 10 Days
   Fleet GALE Lite Operations – A-230-0031 – 7 Days
   AN/SSX-1 Fleet Operations – A-102-1112 – 3 Days
   AN/USQ-151 Joint Tactical Terminal (JTT) Operator – A-101-0060 – 4Days

NOTE: Listed NECs are only those that SELRES are qualified to earn based upon NAVPERS 18068F Volume 2. Most SELRES CTTs are assigned to billets coded for NECs C07A or C17A. NEC School funding availability is based on billet requirements.

Considerations for advancement from E6 to E7

- EIWS qualified (additional warfare qualifications based on opportunity/assignment)
- FCPO involvement/leadership
- Unit LPO or DLPO
- Command collateral duties (e.g., CFL (NEC 8CFL), Unit Career Information Program Manager (NEC 806R), etc.)
- Completion a rate-specific mobilization or other active duty assignment in support of fleet, joint, or special operations

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Considerations for advancement from E7 to E8

- EIWS qualified (additional warfare qualifications based on opportunity/assignment)
- CPOA involvement/leadership
- Active in Foundational Leadership Training, including leadership in "Sailor 360" program as well as Initiation Training
- Unit LCPO or DLCPO of large command
- CNIFR Region Staff or CSEL and/or CNIFR HQ Staff
- Completion a rate-specific mobilization or other active duty assignment in support of fleet, joint, or special operations

Considerations for advancement from E8 to E9

- EIWS qualified (additional warfare qualifications based on opportunity/assignment)
- CPOA involvement/leadership
- Active in Foundational Leadership Training, including leadership in "Sailor 360" program as well as Initiation Training
- Unit LCPO or DLCPO of large command
- CNIFR Region CSEL and/or CNIFR HQ Staff
- Graduate of Senior Enlisted Academy or other Service Equivalent
- Completion a rate-specific or CMC/CSC (if qualified) mobilization or other active duty assignment in support of fleet, joint, or special operations

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Cryptologic Technician - Technical
Occupational Advancement Requirement Standards (OARS) to E4
NAVEDTRA 44030

NAME:

These Occupational Advancement Requirement Standards (OARS) may be used to validate minimum competencies for performing various rating-specific tasks in paygrade E4 in this rating. OARS is based on the Personnel Advancement Requirements (PARS) that were in place prior to 2000 and encompass the Occupational Standards (OCCSTDs) for the rating/paygrade.

Generally, each OARS task area encompasses one or more occupational standards on the same or similar subjects and is written in on-the-job rating language. Completion indicates the candidate can perform the tasks. If circumstances exist that limits a Sailor's ability to effectively demonstrate any OARS task element due to equipment configuration, mission, or operational status, a command may deem a physical demonstration portion not mandatory. However, commanding officers (CO) must be satisfied that the individual possesses the necessary knowledge, skills, and abilities (KSAs) and can properly demonstrate any OARS task at the E4 paygrade, at the current command or other future commands before final signature.

OARS is not designed to replace other qualification programs such as Personnel Qualification Standards (PQS). OARS items that duplicate "sign off" items in these types of programs can be signed off if they have already been signed off under any of these types of programs. OARS is noncompetitive and no relative or absolute mark is assigned.

ELECTROMAGNETIC SPECTRUM OPERATIONS

Task Objective	** Supv Init	Date
Identify Electromagnetic Interference (EMI)		
Monitor Electromagnetic (EM) spectrum		
Monitor own force emissions		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

PENALTY STATEMENT
Any person who, with intent to deceive, signs any false record, return, regulation, order, or other official document, knowing it to be false, or makes any other false official statement knowing it to be false, shall be punished as a court-martial may direct.
(Aug. 10, 1956, ch. 1041, 70A Stat. 71; Pub. L. 114–328, div. E, title LX, § 5419, Dec. 23, 2016, 130 Stat. 2946.)

ELECTRONIC INTELLIGENCE (ELINT) OPERATIONS

Task Objective	** Supv Init	Date
Analyze broadcast data (e.g. national, Global Command and Control System Maritime (GCCS-M), Intelligence Broadcast System/Common Integrated Broadcast (IBS/CIB), etc.)		
Analyze historical Signals Of Interest (SOI) data		
Analyze Signals Of Interest (SOI)		
Annotate Radio Detection and Ranging (RADAR) affected performance (e.g. Radio Frequency (RF), interpulse modulation, intrapulse modulation, etc.)		
Calculate Pulse Repetition Frequency (PRF)		
Calculate Radio Detection and Ranging (RADAR) parameters (e.g. Pulse Repetition Intervals (PRI), Maximum Unambiguous Ranges (MUR), minimum range, etc.)		
Collect Signals Of Interest (SOI)		
Conduct analysis in the frequency domain		
Conduct cryptologic and intelligence briefs		
Configure Electronic Intelligence (ELINT)/Electronic Warfare (EW) equipment		
Construct Order Of Battle (OOB)		
Correlate national systems data to platform		
Correlate Signals Of Interest (SOI)		
Crossfix Signals Of Interest (SOI) intercepts		
Determine radar systems capabilities		
Determine target source utilizing Unintentional Modulation on Pulse (UMOP)		
Evaluate Signals Of Interest (SOI)		
Evaluate strategic situations (operational, tactical)		
Generate reports		
Identify interpulse modulation types (e.g. pulse constant, jitter, stagger, etc.)		
Identify intrapulse modulation types (e.g. unmodulated, linear frequency modulation, bi-phased shift keyed, etc.)		
Identify scan types		
Measure Pulse Duration (PD)		
Measure Pulse Repetition Intervals (PRI)		
Measure Radio Frequency (RF) (high, low, and center tune)		
Measure scan times		
Perform Operational Electronic Intelligence (OPELINT) analysis (e.g. Intelligence Preparation (IPR), Maritime Domain Awareness (MDA), etc.)		
Record Signals Of Interest (SOI)		
Report Signal Of Interest (SOI) (e.g. message traffic, etc.)		
Research Intelligence Community (IC) databases		
Search Electronic Intelligence (ELINT) databases		
Shut down Electronic Intelligence (ELINT)/Electronic Warfare (EW) equipment		
Startup Electronic Intelligence (ELINT) equipment		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

PENALTY STATEMENT

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(Aug. 10, 1956, ch. 1041, 70A Stat. 71; Pub. L. 114–328, div. E, title LX, § 5419, Dec. 23, 2016, 130 Stat. 2946.)

ELECTRONIC WARFARE OPERATIONS

Task Objective	** Supv Init	Date
Conduct Electronic Attacks (EA)		
Conduct Electronic Support (ES) operations		
Configure Electronic Warfare (EW) systems		
Deploy Electronic Warfare (EW) countermeasures		
Disseminate tactical information (internal/ external)		
Maintain Electronic Warfare (EW) status boards and logs		
Maintain local emitter libraries		
Perform fusion analysis		
Perform tactical communications (e.g. brevity codes, fleet tactical signals, etc.)		
Report Essential Elements of Friendly Information (EEFI) violations		
Startup Tactical Data Processors (TDP)		
Utilize Rapid Evaluation Guidelines (REG)		
Verify Emission Control (EMCON) conditions in effect		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

PENALTY STATEMENT
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(Aug. 10, 1956, ch. 1041, 70A Stat. 71; Pub. L. 114–328, div. E, title LX, § 5419, Dec. 23, 2016, 130 Stat. 2946.)

INFORMATION OPERATIONS

Task Objective	** Supv Init	Date
Calculate threat detection envelopes		
Collect Information Operation (IO) asset capabilities and limitations		
Conduct Information Operations (IO) utilizing Tactical Data Processors (TDP)		
Conduct Military Deception (MILDEC) operations		
Disseminate Military Information Support Operations (MISO) material		
Perform Pre-Planned Responses (PPR)		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

PENALTY STATEMENT
Any person who, with intent to deceive, signs any false record, return, regulation, order, or other official document, knowing it to be false, or makes any other false official statement knowing it to be false, shall be punished as a court-martial may direct.
(Aug. 10, 1956, ch. 1041, 70A Stat. 71; Pub. L. 114–328, div. E, title LX, § 5419, Dec. 23, 2016, 130 Stat. 2946.)

PLANNING

Task Objective	** Supv Init	Date
Research adversary capabilities and limitations		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

PENALTY STATEMENT
Any person who, with intent to deceive, signs any false record, return, regulation, order, or other official document, knowing it to be false, or makes any other false official statement knowing it to be false, shall be punished as a court-martial may direct.
(Aug. 10, 1956, ch. 1041, 70A Stat. 71; Pub. L. 114–328, div. E, title LX, § 5419, Dec. 23, 2016, 130 Stat. 2946.)

COMMAND ENDORSEMENT
Command signatures signify the meeting of the minimum competencies for those in paygrade E-4 in this rating.
Signature level at discretion of command.

DIVISION OFFICER:

_____

DEPARTMENT LCPO:

_____

DEPARTMENT HEAD:

_____

COMMAND CAREER COUNSELOR:

_____

COMMAND MASTER CHIEF:

_____

COMMANDING OFFICER:

_____

PENALTY STATEMENT
Any person who, with intent to deceive, signs any false record, return, regulation, order, or other official document, knowing it to be false, or makes any other false official statement knowing it to be false, shall be punished as a court-martial may direct.
(Aug. 10, 1956, ch. 1041, 70A Stat. 71; Pub. L. 114–328, div. E, title LX, § 5419, Dec. 23, 2016, 130 Stat. 2946.)

Command Comments – Command Use Only:

Enlisted Community Manager Comments:

Once an individual Sailor's Occupational Advancement Requirement Standards (OARS) have been completed and endorsed by the local Command, documentation of completed OARS by the Command Pay and Personnel Administrator (CPPA), Training Officer, or other authorized command representative will be via Navy Standard Integrated Personnel System (NSIPS) within the Personnel Qualifications section, or Advanced Skills Management (ASM) within the Qual/Cert Records tab. Entries will generate an Enlisted Service Record (ESR) and Electronic Training Jacket (ETJ) entry. These entries provide Sailors with electronic documentation of OARS completion as well as Command and Navy Advancement stakeholders ability to monitor the execution of OARS.

LaDR
NAVY LEARNING and DEVELOPMENT ROADMAP

Cryptologic Technician - Technical
Seaman Recruit to Seaman

NAME:

SKILL TRAINING
(Schools, courses and assignments directly related to occupation)

REQUIRED SKILL TRAINING

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
Entry Level ELINT [1]	IWTC Corry Station, Pensacola, FL	A-231-0073	55 days	
SLQ-32 Shipboard Operations (C01A) [1]	IWTC Corry Station, Pensacola, FL	A-102-0248	35 days	
AN/USQ-149(V)2 Operator (CLUSTER SNOOP) [1,3]	IWTC Corry Station, Pensacola, FL	A-233-0125	20 days	
Advanced Technical Training [1,2]	IWTC Corry Station, Pensacola FL	A-230-3144	32 days	
AN/SLQ-32B(V)2 Maintenance (C00A) [1,2]	IWTC Corry Station, Pensacola, FL	A-102-1980	68 days	
AN/SLQ-32(V)3/4 Maintenance (C02A/C03A) [1,2]	IWTC Corry Station, Pensacola, FL	A-102-0216	43 days	

1 - Reserve opportunities may exist, contact Reserve Forces Code N7 for authorization.
2 - Advanced Electronics Field only.
3 - Volunteers for Submarine Duty

RECOMMENDED SKILL TRAINING

Course Title	Course Location	CIN/CSE/ACE ID	Course Length	Date Completed
Surface EW Threat Recognition [1]	CIWT Commands and Training Sites	A-233-0005	10 days	
Fleet GALE Lite Operations [1]	CIWT Commands and Training Sites	A-230-0031	7 days	
AN/SSX-1 Fleet Operations [1]	CIWT Commands and Training Sites	A-102-1112	3 days	
AN /USQ-151 Joint Tactical Terminal (JTT) Operator [1,3]	CIWT Commands and Training Sites	A-101-0060	4 days	

1 - Reserve opportunities may exist, contact Reserve Forces Code N7 for authorization.
3 - A-101-0060 COMBINED/REPLACED LEGACY VERSION OF 3 SEPARATE COURSE OF MAINTAINER, PRODUCER, AND OPERATOR

NAVY ENLISTED CLASSIFICATION CODE (NEC) OPPORTUNITIES

Course Title	Course Location	CIN/CSE/ACE ID	Course Length	Date Completed
802A - Naval Aircrewman Candidate [1]	NASC Pensacola, FL	C-050-1500	5 weeks	
C06A - EP-3E Cryptologic Technician Operator/Analyst [1]	NATTC Whidbey Island, WA	C-050-3021		
C07A - Intermediate Operational Electronic Intelligence (OPELINT) Analyst [1]	IWTC Corry Staion, Pensacola, FL	A-231-0076	45 days	
C15A - Cryptologic Direct Support Element (CDSE) Subsurface Operator [1]	IWTC Corry Station, Pensacola, FL	A-231-0125	4 weeks	
C00A - AN/SLQ-32B(V)2 Maintenance [1]	IWTC Corry Station, Pensacola, FL	A-102-1980	68 days	
C02A/C03A - AN/SLQ-32(V)3/4 Maintenance [1] [2]	IWTC Corry Station, Pensacola, FL	A-102-0216	43 days	
C04A - AN/SLQ-32(V)6 Maintenance [1]	IWTC Corry Station, Pensacola FL	A-230-1313	58 days	
C36A - AN/SLQ-32(V) 6 CTT Operator [1]	OJT onboard installed V6platform		36 months Available through PQS completion and operational use while attached to installed (V)6 platform	

1 - Reserve opportunities may exist, contact Reserve Forces Code N7 for authorization.
2 - 1 - V3 AND V4 ARE COMBINED IN THE SAME COURSE OF INSTRUCTION

JOB DESCRIPTION

Cryptologic Technicians (Technical) (CTT) operate and maintain electronic sensors and computer systems; collect, analyze, exploit and disseminate Electronic Intelligence (ELINT) in accordance with Fleet and National tasking; provide safety of platform, Indications and Warning (I&W), and Anti-Ship Missile Defense (ASMD); provide technical and tactical guidance to Warfare Commanders and National consumers in support of surface, subsurface, air, and special warfare operations.

RECOMMENDED BILLET ASSIGNMENTS

The Cryptologic Technician (Technical) (CTT) operates and maintains electronic sensors, analysis suites, Global Command and Control System-Maritime (GCCS-M) Common Operational Picture (COP). Work assignments include Navy Information Operations Commands (NIOC's), VQ/VAQ squadrons, surface and subsurface platforms.

PERSONAL AND PROFESSIONAL DEVELOPMENT
(Completed at reporting 60 day Career Development Board)

Command Address

QD Phone Number:

Mobilization UIC:

Naval Reserve Activity:

Division Officer: Phone Number:

Leading Chief Petty Officer: Phone Number:

Leading Petty Officer: Phone Number:

Sponsor/Mentor: Phone Number:

Depart/Division Career Counselor: Phone Number:

Date of Initial Entry to Military Service (DIEMS):   Date of Initial Entry Reserve Forces (DIERF):

Pay Entry Base Date (PEBD):

ADSD: Report Date: EAOS/EOS: PRD: SEA / SHORE: /

PAYGRADE E1/E2 (9 months time in service required for advancement to E2 and E3)
PAYGRADE E3 (6 months time in service required to be eligible for advancement to E4)

Date Advanced: Eligible Advancement Date: Number of times up:

HYT Date: Security Clearance Level: Date Last updated:

Command INDOC complete:

CAREER DEVELOPMENT BOARDS:
Use OPNAVINST 1040.11(ser) & Career Counselor Handbook NAVPERS 15878
Reason for Convening/Discussion Items: (Upon completion update (CIMS) Career Information Management System)

Reporting (within 60 days for active duty or four drill weekends for SELRES) (Date Conducted):

Professional Apprenticeship Career Track (PACT) only:
    6 Month: 12 Month: 18 Month:

24 Month: 48 Month: 60 Month:

Family Care Plan: Mil to Mil:

Sailor 360:   Special Program: Member Request:

HYT 24 months (Date):   HYT Waiver Date: ☐ Approve   ☐ Disapprove

C-WAY-REEN 18 months to EAOS/EOS: Career Waypoint not approved:

Rating Conversion: Navy Formal Training Schools Request ("A"/"C"etc):

Transfer: Separation: Career Status Bonus (election message received):

Physical Fitness Test Failure: Overseas Tour Extension Incentives Program (OTEIP):

Advancement Center: Visit MNP Advancement & Promotion page located under the Career & Life Events Tab
(Items to collect/discuss: Bibliography for Advancement, Enlisted Advancement Exam Strategy Guide, Profile Sheets)
Advancement:

Enlisted to Officer Commissioning Program Application & Administration Manual OPNAVINST 1420.1(series):

Commissioning Programs Applications: (prior to submission, command endorsement):

Seaman to Admiral 21 (STA-21):   Medical Enlisted Commissioning Program (MECP):

Naval Academy: Naval Academy Preparatory School (NAPS):

Officer Candidate School:

QUALIFICATIONS

Sea/Shore General Qualifications Watch Standing Qualifications	Report Date	Completion Date (N/A if not required)
Fire and Security		
Messenger of the Watch (MOOW)		
Ship Board Fire Fighting		
Aviation Fire Fighting		
Damage Control		
Advanced Damage Control		
3M 301 Maintenance Person		
Weapons Qualification		

Mandatory warfare qualification for enlisted Sailors assigned to designated warfare qualifying commands:

Warfare qualification programs	Report Date	Completion Date (N/A if not required)
Aviation Warfare Specialist		
Expeditionary Warfare Specialist		
Information Warfare Specialist		
Naval Aviation Warfare Specialist (Aircrew)		
Submarine Warfare Specialist		
Surface Warfare Specialist		

Rate Specific/Department Qualifications (Add)	Report Date	Completion Date (N/A if not required)
Damage Control Petty Officer (DCPO)		

Notes on Qualifications:

CREDENTIALING

Navy Credentialing Opportunities On-Line (Navy COOL): Navy COOL assists Sailors (active & reserve) by funding the certification & licensing exams that map their Navy education, training, experience, and competencies to industry/civilian-recognized credentials and occupational equivalents. Sailors may obtain funding for credential examinations, renewals, maintenance fees, and other mandatory examination administrative fees.

The following certifications and licenses are applicable to the CTT-Cryptologic Technician Technical rating. *They may require additional education, training or experience.*

For more information about these credentials, visit NAVY COOL at https://www.cool.osd.mil/usn/.

Target Paygrade	Certifying Agency	Credential Title	Date Completed
E4	Certifying Technical Employee Competence (CertTEC)	Basic Electricity and Electronics - Alternating Current (BEE-AC)	
E4	Certifying Technical Employee Competence (CertTEC)	Basic Electricity and Electronics - Analog (BEE-A)	
E4	Certifying Technical Employee Competence (CertTEC)	Basic Electricity and Electronics - Digital (BEE-D)	
E4	Certifying Technical Employee Competence (CertTEC)	Basic Electricity and Electronics - Direct Current (BEE-DC)	
	Cisco Systems, Inc.	Cisco Certified Network Associate (CCNA)	
	Computing Technology Industry Association (CompTIA)	CompTIA A+	
	Computing Technology Industry Association (CompTIA)	CompTIA Linux+	
	Computing Technology Industry Association (CompTIA)	CompTIA Network+	
E4	Defense Intelligence Agency PMO (DIA)	Certified Collection Management Professional - Fundamental (CCMP-F)	
E5	Defense Intelligence Agency PMO (DIA)	Certified Defense All-Source Analysis - Level 1 (CDASA-1)	
E7	Defense Intelligence Agency PMO (DIA)	Joint Intelligence Planner-Proficiency Level I (JIP-I)	
E4	Electronics Technicians Association, International (ETA-I)	Associate Electronics Technician (CETa)	
E4	Electronics Technicians Association, International (ETA-I)	Electronics Associate AC (EM2)	
E4	Electronics Technicians Association, International (ETA-I)	Electronics Associate Analog (EM3)	
E4	Electronics Technicians Association, International (ETA-I)	Electronics Associate Comprehensive (EM5)	
E4	Electronics Technicians Association, International (ETA-I)	Electronics Associate DC (EM1)	
E4	Electronics Technicians Association, International (ETA-I)	Electronics Associate Digital (EM4)	
E4	Electronics Technicians Association, International (ETA-I)	Fiber Optics Installer (FOI)	
E4	Electronics Technicians Association, International (ETA-I)	Fiber Optics Technician (FOT)	
E4	International Society of Certified Electronics Technicians (ISCET)	Certified Electronics Technician - Associate-Level (Associate CET)	
	Linux Professional Institute (LPI)	Linux Professional Institute LPIC-1	
	Red Hat, Inc.	Red Hat Certified System Administrator (RHCSA)	
E4	Transportation Security Administration (TSA)	Transportation Worker Identification Credential (TWIC)	
	Under Secretary of Defense for Intelligence and Security (USD(I&S))	Certified Counter-Insider Threat Professional - Analysis (CCITP-A)	

Target Paygrade	Certifying Agency	Credential Title	Date Completed
	Under Secretary of Defense for Intelligence and Security (USD(I&S))	Certified Counter-Insider Threat Professional - Fundamentals (CCITP-F)	
	Under Secretary of Defense for Intelligence and Security (USD(I&S))	Intelligence Fundamentals Professional Certification (IFPC)	

Out of Rate Certifications and Licensure

Academic Degrees – You are now eligible for credentials towards an earned academic degree.

Cross-Rated Sailors – If you have cross-rated, you now are eligible for credentials related to your prior rating.

Off-Duty or Command-Sponsored Training – You are now eligible for credentials for documented training that fully prepares you for a credential.

Navy Reservists – You may now be eligible for funding of credentials related to your civilian occupation.

Prior Other-Service Enlisted Occupation - If you are Navy enlisted (Active or Reserve), you may now be eligible for funding for credentials related to prior other-Service (Army, Air Force, Marine Corps, Coast Guard) enlisted occupation.

Collateral Duty/Out of Rate Assignments - Credentials are also available in these collateral duties/out of rate assignments in which you are serving in or have served in.

Credentials Earned & Maintained Prior to Joining the Navy - If you are Navy enlisted (Active or Reserve), you may now be eligible for funding for credentials that were earned, and maintained, prior to your enlistment in the Navy. The certification or license must have relevance to the needs of the Navy, and must appear on Navy COOL, although it does not need to show the Navy Bucks icon to be funded.

* See the *Additional Funding Opportunities* section on any rating page on Navy COOL for further details.

United Services Military Apprenticeship Program (USMAP): USMAP is available to most active duty occupations and is certified by the U.S. Department of Labor. This is the largest apprenticeship program operating in the U.S. and is recognized by all 50 states. Completion of one of these programs would qualify you as a journeyman, which could mean a significantly higher starting salary in the civilian work force. Most programs require 5-8 years to complete but are transferable if you decide to leave the service prior to completion. USMAP opportunities also exist for SELRES with orders over 12 months.

The following USMAP apprenticeships are applicable to the CTT-Cryptologic Technician Technical rating.

For more information about these apprenticeships, visit USMAP at https://usmap.netc.navy.mil/.

Rank	Apprenticeship	Date Completed
E1 - E9	Computer Operator	
	Counselor (Professional & Kindred)	
	Electronics Technician	
	Radio Mechanic	

POST MILITARY OCCUPATIONS

The following post military occupations are similar to the CTT-Cryptologic Technician Technical Rating. For more information about these occupations, visit NAVY COOL at https://www.cool.osd.mil/usn/.

Occupation (Civilian Employer)
Computer and Information Systems Managers
Computer Programmers
Computer Systems Analysts
Database Administrators
Electrical and Electronic Engineering Technologists and Technicians
Electrical and Electronics Repairers, Commercial and Industrial Equipment
Intelligence Analysts
Network and Computer Systems Administrators
Telecommunications Equipment Installers and Repairers, Except Line Installers

Occupation (Federal Employer)
0332 - Computer Operation Series
0856 - Electronics Technical Series
1540 - Cryptography Series
1541 - Cryptanalysis Series
9944 - Electronics Technician

AC to AC and FTS to FTS - Continue Navy career on Active Duty.

E6 and below with less than 14 years of service will require a C-Way Application to be approved for reenlistment or extension.

Once C-Way application is approved, the Sailor should request to Reenlist or Extend with the appropriate form.

REENLIST / EXTEND: Request Chit/Form:

Career Waypoints-Reenlistment Approval:

School as a Reenlistment Incentive:

Prior Service Reenlistment Eligibility - Reserve (PRISE-R):

MyNavy Assignments (MNA):

Medical/Dental Screening:

Command Recommendation (evaluation):   Bonus: Ceremony:

RC to AC/FTS

See MILPERSMAN 1306-1505: Sailors may complete a component change from the Reserve Component (RC) to AC (RC2AC/FTS). This not only leverages existing skill sets that reside in the RC population to improve and maintain AC community health, but also provides qualified Sailors with an opportunity to resume or begin a career in the AC/FTS. This component change refers to a permanent transfer from RC2AC/FTS. This voluntary program enables qualified, eligible enlisted RC Sailors to submit applications in Career Waypoints (C-WAY) based on available quotas published on the Bureau of Naval Personnel (BUPERS), Enlisted Community Manager (BUPERS-32) Web page at: https://www.public.navy.mil/bupers-npc/enlisted/community/selres/Pages/EnlistedReserveOpportunities.aspx.
If you have any questions or concerns, contact your unit or NOSC career counselor.

RC to RC - Continue your Navy career as a Reservist.

Submit reenlistment request utilizing NAVRES 1160/1 Drilling Reservist Reenlistment Worksheet.

REENLIST / EXTEND: Request Chit/Form:

School as a Reenlistment Incentive:

MyNavy Assignments (MNA):

Medical/Dental Screening:

Command Recommendation (evaluation):   Bonus: Ceremony:

AC/FTS to CIP

The Career Intermission Program allows Officers and Enlisted Sailors to transfer out of the active component (AC/FTS) and into the Individual Ready Reserve for a period of one to three years to pursue personal or professional obligations outside the Navy, while providing a means for their seamless return to active duty.
For additional information, go to: https://www.public.navy.mil/bupers-npc/career/reservepersonnelmgmt/IRR/Pages/CIP.aspx.

AC/FTS to Secretary of the Navy Tours with Industry

This program provides a venue for exceptional Sailors to experience innovative business practices. Navy fellows are fully immersed in company practices and will be actively engaged in projects and company operations. Past fellows were assigned to companies including VMware, Qualcomm, Apple, Incorporation, Boeing, Tesla, Oak Ridge National Laboratory, GE Digital, Amazon, FedEx, Northrup Grumman, Space X, LinkedIn and USAA.
For additional information go to: https://www.public.navy.mil/bupers-npc/career/talentmanagement/Pages/SNTWI.aspx.

Canvasser Recruiter (CANREC)

The Canvasser Recruiter (CANREC) Recall Program is a voluntary and temporary recall program for RC personnel to serve as production recruiters in support of the Navy Prior Service recruiting mission. Personnel eligible to volunteer for a Definite (also termed as "temporary") Recall to Active Duty (ACDU) as a CANREC are Reserve Component (RC) members, specifically Selected Reserve (SELRES), Individual Ready Reserve (IRR-ASP), and Voluntary Training Unit (VTU) personnel.
For additional information, go to:
  https://www.public.navy.mil/bupers-npc/career/reservepersonnelmgmt/definiterecall/Pages/CANRECRecall.aspx.

Career Waypoints-Reenlistment:

The Command Career Counselor is your local advocate to assist you with the Career Waypoints application process.
- E3-E6 Sailors with less than 14 years of service must submit a Career Waypoints application, regardless of reenlistment intentions. Sailors who do not desire to reenlist will submit an "intends to separate" application. Sailors not eligible for reenlistment will submit a "not eligible" application.
- The Career Waypoints system automatically generates most of the applications needed by Sailors. Applications must be submitted no later than 16 months prior to expiration of active/reserve obligated service (EAOS/EOS) or as extended (SEAOS/SEOS). Sailors with less than 24 months of contract time remaining at their projected rotation date (PRD) will submit an application 15 months prior to their PRD. In either case, the Career Waypoints system will automatically generate

applications for Sailors 18 months prior to either timeframe. Applications required outside of the established C-Way gates can be submitted as Special Circumstance applications. Examples of when these may be needed include OBLISERVE for special duty, decommissioning or homeport shift.

- The C-Way 3-2-1 Process aligns career decisions with the detailing process. Soft End of Active/Reserve Obligated Service (SEAOS/SEOS)/End of Active/Reserve Obligated Service (EAOS/EOS) applications are created by C-Way at the 18 month from S/EAOS/EOS mark and must be submitted by the Command Career Counselor at the 16 month mark. This provides time for the Career Counselor to validate the Sailor's information and to ascertain the Sailors career intentions. The first C-Way review gate occurs from 16 to 13 months from S/EAOS/EOS with career choice options of in-rate, conversion, and Selected Reserve. The second review gate occurs from 12 to 9 months from S/EAOS/EOS with career choice options of conversion and Selected Reserve. From 8 months to 4 months to S/EAOS/EOS the Sailor can only choose Selected Reserve affiliation.

- Monthly reenlistment quotas are limited and must be reserved for our best and brightest Sailors who desire to Stay Navy. Sailors must choose one of the following based on their desires and qualifications:
  - Reenlist-in-Rate,
  - Reenlist-in-rate, Willing to Convert
  - Convert only
  - AC to AC or FTS to FTS
  - RC to AC/FTS
  - RC to RC
  - AC/FTS to CIP (Intermission)
  - AC/FTS to Tour w/ Industry
  - SELRES option
  - Canvasser Recruiter
  - Intend to separate
  - Not eligible

In February 2014, C-Way delivered auto-approval capabilities to provide reenlistment decisions on S/EAOS/EOS applications more quickly for eligible ratings. This changed the monthly processing of reenlistment applications as described below.

- If you are in an, "open" rating or a "balanced" rating in an undermanned year group or an E6, you are eligible for reenlistment, and your application is submitted with correct data it will be auto-approved and returned immediately, and you can reenlist.
- If you are in a "competitive" rating or a balanced rating but not an undermanned year group, then your application will be processed through the monthly Rack and Stack process. Applications submitted in one month are processed in Rack and Stack the following month.
- For Nuclear ratings, all applications are reviewed by enlisted community managers on an ongoing basis throughout the processing month.
- If required data is missing (evaluations, Physical Fitness Assessment (PFA) data, security clearance etc.) the application will be denied with a note to your career counselor regarding what needs to be fixed. It is critical the Command Career Counselor reviews these notes to ensure Sailors are not disadvantaged in their opportunities for retention.
- Upon completion of the monthly process, Career Waypoints results will be available to command users via the Monthly report section of the Career Waypoint system.
- For additional guidance, see MILPERSMAN 1160-140, NAVADMIN 231/17, and your Career Counselor
  Or call My Navy Call Center: (833) 330-MNCC or (901) 874-MNCC; or askmncc@navy.mil

Targeted Reentry Program (TRP)
NAVADMIN 047/18 empowers COs with the ability to identify and recommend SELRES on active duty/Definite Recall (ACDU) and Full Time Support (FTS) enlisted personnel, who are the best and brightest, the option for expedited reentry to Active Duty in the Navy.

- *Golden Ticket* – Sailors are guaranteed an expedited return to ACDU within one year from separation from ACDU. Sailors who do not use their Golden Ticket within one year are automatically convert to a Silver Ticket for one additional year. Sailors must remain fully qualified.
- *Silver Ticket* – Sailors are afforded an expedited return to ACDU within two years from separation date. This opportunity is subject to Needs of the Navy (NOTN) and provided the Sailor remains fully qualified.

Upon completion of the monthly process, Career Waypoints results will be available to command users via the Monthly report section of the Career Waypoints system.

For additional guidance, see MILPERSMAN 1001-260, NAVADMIN 231/17, and your Career Counselor
Or call My Navy Call Center: (833) 330-MNCC or (901) 874-MNCC; or askmncc@navy.mil

AC/FTS TRANSFER:

15 Months	12 Months	9 Months	6 Months	Orders Received
Career Waypoint	Career Waypoint	Career Waypoint	Accept Orders	Screening
Exception Family Member	Exception Family Member	Medical/Dental	Reverse Sponsor	Obligate
MNA	MNA	MNA	Relocation (FFSC)	Bonus
Mil to Mil	Eval	SRB	SRB	
Family Care Plan				
Continuous Overseas Tours (COT)				
Overseas Tour Extension Incentive Program (OTEIP)				

SELRES TRANSFER:

12 Months	9 Months	6 Months	3 Months	Orders Received
MNA	MNA	MNA	MNA	Sign Eval
(verify account access)	*(extend in current field)*	*(apply for billets)*	*(apply for billets)*	
Family Care Plan		Start Eval		
Mil to Mil		Reverse Sponsor		
		Incentives/EOS opportunities		

For additional assistance in transfer and relocation, go to the Military OneSource website: https://www.militaryonesource.mil/ and visit your Fleet and Family Support Center on base.

SEPARATING/RETIRE*:

18 -12 months	6 months	90 days	30 days
TAP*	MED/DEN	Copy of Records	Copy of Records
Complete DD 2648	Relocation	Official Record CD	PSD
Transition Planning	Relocation Services (FFSC)	Arrange Ceremony	MED/DEN
Annual Statement of Service History (ASOSH)	Reserve Affiliation	Request Leave / PTDY	DD 214*
Reserve Only	VA/DVA		

Upon demobilization, SELRES will need Transition Assistance Program (TAP) and DD-214; DD-214 is not required for Reserve Retirements.

PHYSICAL FITNESS:

Participate in a year-round physical fitness program to meet Navy fitness and BCA standards. Review and verify accuracy of PFA data in PRIMS within 60 days of the PFA cycle. (PRIMS is accessible through your BUPERS Online Account)

Height   Weight   If Required (AC   BCA   )

Last 2 PRT Cycles: Forearm Plank   /   Push-ups   /   Run/Swim/Cardio   /

Overall Score   /

List date (if) any PRT/BCA failure(s) over the last 5 years   /

List if any Medical Waiver(s)   /

For more information on Navy Fitness, visit: https://www.public.navy.mil/bupers-npc/support/21st_Century_Sailor/physical/Pages/default2.aspx

PROFESSIONAL MILITARY EDUCATION (E1/E2/E3)

(Resident and non-resident coursework designed to enhance a Sailor's general military professional knowledge and abilities)

EDUCATION: (Prior to considering any pursuit of off duty education or program enrollment call the Navy College Virtual Education Center (NCVEC) 877-838-1659 or Visit your overseas Navy College Office.)

Education Plan Completed (Navy College Office/NCVEC)

Current Education Level

Degree Goal

** Various degree options are available in the Advanced Education section. **

Goal: Date: AA/AS   BA/BS   Master
(Credits to earn a degree - AA/AS: 60 SH/90 QH, BA/BS: 120 SH/180, QH, Master /Doctorate: Variable based on program)

Number of current credits   American Council on Education (ACE) recommended credits

Joint Service Transcripts (JST)

HS Transcripts   College Transcripts

Date Degree Obtained: AA/AS   BA/BS   Master   Doctorate

For entry into JST, have your College/University send official transcripts to:
Naval Education and Training Command N644
JST Operation Center
6490 Saufley Field Road
Pensacola, FL 32509
Email: JST@DODED.mil

VOLUNTARY EDUCATION: Links to study guides, exam preparations, and practice tests are located on the DANTES website https://www.dantes.doded.mil/

Academic skills   NCPACE   CLEP   DSST

TA   MGIB   MGIB-SR   Post 9/11 GIB

E1/E2/E3 REQUIRED NAVY PME:

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
Foundational Leader Development Course [5]	Water front/ Flightline/ Various [4]	NELD-03	2.5 days	
Navy Military Training (Life Skills) (Pre-A School Delivery only) [6]	Command Delivered	A-500-1000	2 days	
Professional Military Knowledge Eligibility Exam (PMK-EE) for E4	Navy e-Learning	NETCPDC-PMK-EE-E4-1.0		
Ethics Training	Command Delivered			
Required General Military Training Topics For FY 2021 (Delivery determined by command discretion) [1]				
Sexual Assault Prevention and Response Awareness (SAPR) [3]	Command Delivered	CPPD-GMT-SAPRA-1.0		
Cyber Awareness Challenge	MNP	DOD-IAA-V16.0		
Counterintelligence Awareness and Reporting	Command Delivered/ MNP	DOD-CIAR-1.0		
Records Management	Command Delivered/MNP	DOR-RM-010-1.2		
Privacy Act	Command Delivered			
Suicide Prevention [3]	Command Delivered	CPPD-GMT-SAP-1.0		
Antiterrorism Level I [2]	Command Delivered/ MNP	CENSECFOR-AT-010-1.0		

1 - Verify GMT topics on the My Navy Portal (MNP) GMT webpage
2 - Personnel with less than 3 years of time-in-service must also complete Antiterrorism Level 1 training. For personnel with greater than 3 years of time-in-service, Antiterrorism Level 1 periodicity is now a triennial requirement and will be mandated for all hands in FY-22.
3 - The recommended method of delivery for SAPR and Suicide Prevention annual training is via face-to-face, small group facilitated discussions.
4 - See MNP Enlisted Leadership Development page: https://www.mnp.navy.mil/group/training-education-qualifications/enlisted-leader-development.
5 - Available for paygrades E3 and E4
6 - Required for delivery in "A" School for all ratings

E1/E2/E3 REQUIRED COMMUNITY PME:

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
Surface Electronic Warfare (EW) Operations	MNP	NAVEDTRA 43357-D		
Module 301 Standard Tactical Receive Equipment Display (STRED) Operator				
Module 302 Electronic Warfare (EW) Internal/External Communications Operator/Recorder				
Module 303 Countermeasures Set DCC Operator/AN/UYQ-70 ICAD Operator				
Module 304 AN/ULQ-16 Pulse Analyzer Operator				
Module 307 LAMPS MK III Electronic Sensor Measures Operator (ESMO)				
Module 311 AN/SSX-1 Operator				
Module 313 Electronic Warfare (EW) Operator				
Decoy Launching System (DLS) Operations	MNP	NAVEDTRA 43341-F		
Module 301 Decoy Launching System (DLS) Operator				
Module 302 MK 137 Launcher Team Member				
Module 303 MK 164 Bridge Launcher Control Panel Operator				
Cryptologic Direct Support Element (CDSE) Electronic Support (ES) Operations (Submarine)	MNP	NAVEDTRA 43343		
Module 301 Cryptologic Direct Support Element (CDSE) Electronic Support (ES) Basic Operator				

E1/E2/E3 RECOMMENDED NAVY PME:

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
Basic Military Requirements (NAVEDTRA 14325) (EDITION 1/1/2002)		NAVEDTRA 14325		
Professional Military Knowledge Eligibility Exam (PMK-EE) Study Material	Navy e-Learning	NETCPDC-PMK-EE-SM-1.0		
Military Requirements for Petty Officer Third and Second Class	Navy e-Learning	NRTC-NAVEDTRA-14504-MRFPO-TASC-1.0		
Introductory Enlisted Professional Military Education (IEPME)	Navy e-Learning	Military DON/ PME	18 hrs	
Block 1 Introductory EPME - Introduction	Navy e-Learning	NWC-IEPME-INTRO-B1	-	
Block 2 Introductory EPME - History and Traditions	Navy e-Learning	NWC-IEPME-INTRO-B2	3 hrs	
Block 3 Introductory EPME - Enlisted Professionalism	Navy e-Learning	NWC-IEPME-INTRO-B3	3 hrs	
Block 4 Introductory EPME - Policy and the Navy	Navy e-Learning	NWC-IEPME-INTRO-B4	3 hrs	
Block 5 Introductory EPME - Planning for Operations	Navy e-Learning	NWC-IEPME-INTRO-B5	3 hrs	
Block 6 Introductory EPME - Regional and Cultural Awareness	Navy e-Learning	NWC-IEPME-INTRO-B6	3 hrs	
Block 7 Introductory EPME - Technology in the Maritime Domain	Navy e-Learning	NWC-IEPME-INTRO-B7	3 hrs	
Block 8 Introductory EPME - Conclusion	Navy e-Learning	NWC-IEPME-INTRO-B82	-	
Cultural Awareness	Navy e-Learning	Foreign Language and Culture	45 hrs	
Navy Reserve Fundamentals for Active Duty Course	Navy e-Learning	NAVRESFOR-NRF-3.0	10 hrs	
Nutrition	Navy e-Learning	NMHCI2107V2.1	1 hour	
Personal Financial Management	Navy e-Learning	CPD-PFM-1.0	8 hrs	
PREVENT	Command Delivered	S-501-0150	24 hrs	
Recommended General Military Training Topics For FY 2021 (Delivery determined by command discretion) [1]				
Alcohol, Drug, and Tobacco Awareness	Command Delivered	CPPD-GMT-ADTA-1.0		
Combating Trafficking of Persons General Awareness	Command Delivered/ MNP	DOD-CTIP-3.0		
Domestic Violence Prevention and Reporting	Command Delivered	CPPD-GMT-DV-1.1		
Electromagnetic Maneuver Warfare	Command Delivered/ MNP	NAVIFOR-FEWC-EMW-01.01		
Energy Policy	Command Delivered	OPNAV-GMTE-1.0		
Equal Opportunity, Harassment, and Resolution Options	Command Delivered	CPPD-GMT-EOSH-1.0		
Hazing Policy and Prevention	Command Delivered	CPPD-GMT-HPP-1.0		
Operational Risk Management (ORM)	Command Delivered	CPPD-GMT-ORMTC-1.0		
Operations Security	Command Delivered/ MNP	NOST-USOPSEC-3.0		
Personal Financial Management	Command Delivered	CPPD-GMT-PFM-1.0		
Sexual Health and Responsibility	Command Delivered	CPPD-GMT-SHR-1.0		
Stress Management	Command Delivered	CPPD-GMT-SM-1.0		
Traumatic Brain Injury	Command Delivered			
Privacy Act	Command Delivered	DON-PRIV-2.0		
Antiterrorism Level I [2]	Command Delivered/ MNP	CENSECFOR-AT-010-1.0		
Tactical Combat Casualty Care All Service Member/Tier 1	Command Delivered	B-300-2010		
Financial Management [3]	Command Delivered			

1 - Verify GMT topics on MyNavy Portal GMT webpage

2 - Personnel with less than 3 years of time-in-service must also complete Antiterrorism Level 1 training. For personnel with greater than 3 years of time-in-service, Antiterrorism Level 1 periodicity is now a triennial requirement and will be mandated for all hands in FY-22.

3 - Does not have a mandatory periodicity but is required at career touch points per CNO WASHINGTON DC/191539ZJUL16.

Courses with Recommended Reserve Points:

Commander Navy Reserve Forces (CNRF) N7 determines the number of reserve points awarded for completion of a course taken on Navy e-Learning. This listing should only be used as a guide and is subject to change by direction of CNFR N7.

Navy e-Learning has no control over how many, if any, reserve points are eventually awarded for the completion of a course. All questions concerning the award of reserve points should be directed to CNFR N7.

E1/E2/E3 RECOMMENDED RESERVE PME:

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
Navy Reserve Fundamentals Course (E1-E9)	Navy e-Learning	NAVRESFOR-NRF-3.0		
Navy Reserve Order Writing System/Reserve Defense Travel System (E1-E9)	NRPDC New Orleans	R-510-5514	5 days	
Reserve Medical Administration (E1-E7)	NRPDC New Orleans	R-500-0007	5 days	
Reserve Pay and Personnel Management (E1-E9)	NRPDC New Orleans	R-500-0020	5 days	
Non-Prior Service Accession Program	Navy e-Learning	CNRFC-NPSAP-2 /DoN 0	23 hrs	
Guidance for Mobilization	Navy e-Learning	CNRFC-GMB-1.1 /DoN	4 hrs	
Military Sealift Command 101	Navy e-Learning	CNRFC-MSC101 /DoN 1.1	24 hrs	

For more details or to check for updates please check CANTRAC or the NRPDC Sharepoint page (CAC required): https://private.navyreserve.navy.mil/NRPDC/Pages/NRH_Default.aspx

E1/E2/E3 RECOMMENDED COMMUNITY PME:

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
CTT 3 & 2	RTM			
Naval Space Operations	MNP	NAVEDTRA 14168A		
(NEETS) Module 10, Wave Propagation, Transmission Lines, and Antennas - NAVEDTRA 14182A	Navy e-Learning	NRTC-NAVEDTRA-14182A-N-M10-WPTLAA-1.0		
(NEETS) Module 12, Modulation - NAVEDTRA 14184A	Navy e-Learning	NRTC-NAVEDTRA-14184A-N-M12-M-1.0		
(NEETS) Module 18, Radar Principles - NAVEDTRA 14190A	Navy e-Learning	NRTC-NAVEDTRA-14190A-N-M18-RP-1.0		
NSGTS Module 1, Naval Cryptology in National Security		NSGTP 683-01-00-97		
NSGTS Module 4: Cryptologic Operators Manual for ELINT Operations		NSGTP 683-04-00-00		
NSGTS Module 11: SCI Security and Emergency Destruction		NSGTP 683-11-00-01		
CIDTS Module 13, Information Warfare/Electronic Warfare		CIDTP 683-13-00-05		
SIGE 2810, Fundamentals of Technical ELINT (EA-279)				
Numbering Sytems	MNP	045NS01		
NMCI Information Assurance	MNP	CNET12679		
Active Defense	MNP	DOD-AD-1.0		
DOD Certifier Fundamentals	MNP	DOD-DCF-1.0		
Defense In Depth	MNP	DOD-DID-1.0		
Peterson's Online Academic Skills Course				
Verbal	MNP			
Math	MNP			
New Accession Professional Development (NAPD) Reserve only	Multiple locations		5 days	

NAVY PROFESSIONAL READING PROGRAM (PRP)

The purpose of the Chief of Naval Operations Professional Reading Program (CNO PRP), maintained by CNO PRP program managers at the U.S. Naval War College, is to facilitate the professional and personal development of all Sailors. For additional information on the CNO PRP visit https://www.navy.mil/CNO-Professional-Reading-Program/

READINESS

Visit https://www.navy.mil/CNO-Professional-Reading-Program/Readiness/ for more information.		
Foundational	**Advanced**	**Capstone**
Ghost Fleet – *Singer*	Matterhorn - *Marlantes*	Leaders Eat Last - *Sinek*
Guide to Maritime Strategy – *Holmes*	Red Star Over the Pacific - *Holmes & Yoshihara*	Mindset: Psych of Success - *Dweck*
Neptune's Inferno - *Hornfischer*	Seapower: Guide for 21st Century - *Till*	The Infinite Game - *Sinek*
Six Frigates – *Toll*	The Leader's Bookshelf - *Stavridis*	What is it Like to go to War - *Marlantes*

CAPABILITIES

Visit https://www.navy.mil/CNO-Professional-Reading-Program/Capabilities/ for more information.		
Foundational	**Advanced**	**Capstone**
AI Basics - *Taulli*	Fifth Domain: Cyber - *Clarke*	Deep Thinking: AI - *Kasparov*
Army of None - *Scharre*	Human Compatible - *Russell*	Four Global Forces - *Dobbs*
Burn-In - *Singer*	New Rules of War - *McFate*	Genius Weapons - *DelMonte*
The Future of War - *Freedman*	The Perfect Weapon - *Sanger*	Inevitable - *Kelly*
The Next 100 Years - *Friedman*		

CAPACITY

Visit https://www.navy.mil/CNO-Professional-Reading-Program/Capacity/ for more information.		
Foundational	**Advanced**	**Capstone**
Fearless-SEAL Team Six - *Blehm*	American Naval Thinking - *Haynes*	End of Grand Strategy - *Dombrowski*
One Nation Under Drones - *Jackson*	Fleet Tactics - *Hughes*	Our Robots Our Selves - *Mindell*
The Fleet at Flood Tide - *Hornfischer*	Just and Un-Just Wars - *Walzer*	Second Most Powerful Man - *O'Brien*
Tin Can Sailors - *Hornfischer*	Seapower - *Stavridis*	The Future of Violence - *Wittes*

SAILORS

Visit https://www.navy.mil/CNO-Professional-Reading-Program/Sailors/ for more information.		
Foundational	**Advanced**	**Capstone**
Dichotomy of Leadership - *Willink*	A Tactical Ethic - *Couch*	Fortune Favors Boldness - *Costello*
Ego is the Enemy - *Holiday*	Character Gap - *Miller*	No Pity - *Shapiro*
How to be an Anti-Racist - *Kendi*	Fed Up - *Hartley*	Road to Character - *Brooks*
Tiny Habits - *Fogg*	Military Ethics - *Lucas*	The Honest Truth about Dishonesty - *Aire*
We Can't Talk About That at Work - *Winters*	Sexual Minorities and Politics - *Pierceson*	The New Jim Crow - *Alexander*
	Start with Why - *Sinek*	

MCPON's Suggested Reading

Visit https://www.navy.mil/CNO-Professional-Reading-Program/MCPON-Suggested-Reading/ for more information.		
Master Chief Petty Officer of the Navy (MCPON) Russell Smith identified these 21 additional books as suggested reading.		
A Call to Conscience - *Carson, Shepard, Young*	Happiness Advantage - *Achor*	Starship Troopers - *Heinlein*
Blink: Power of Thinking - *Gladwell*	Jonathan L. Seagull - *Bach*	Team of Teams - *McChrystal, Collins, Silverman, Fussell*
Brave New World - *Huxley*	Only Women in the Room - *Benedict*	The Captain Class - *Walker*
Cannonball! - *Yates*	Overcome - *Redman*	The Good Shepherd - *Forester*
Class 11 - *Waters*	Perform Under Pressure - *Evans*	The Old Man's Trail - *Campbell*
Descent Into Darkness - *Raymer*	Run Silent, Run Deep - *Beach*	Tragedy at Honda Point - *Lockwood*
Duty: A Memoir - *Gates*	Shoot the Women First - *MacDonald*	We Die Alone - *Howarth*

Nearly 200 years ago, the Navy ordered its ships be outfitted with a reading list of 37 books in order to help train and educate Sailors. The Navy's leaders knew then what is still the case today: to outthink our competitors we must study and apply lessons we've learned from our past. Furthermore, it is critically important for our Navy to be a learning organization. And one of the very best ways to do that is to foster an environment where every Sailor deepens their level of understanding and learning.

That is why we launched an updated Chief of Naval Operations Professional Reading Program (CNO-PRP) reading list, with a motto of "Read Well to Lead Well."

E1/E2/E3 RECOMMENDED COMMUNITY READING

Title	Completed
The Deceivers *by John Masters*	
Miracle at Midway *by Gordon Prange, Donald Goldstein, and Katherine Dillon*	
The Puzzle Palace: A Report on America's Most Secret Agency *by James Bamford*	
Body of Secrets *by James Bamford*	
The Hunt For Red October *by Tom Clancy*	
A Matter of Accountability: The True Story of the Pueblo Affair *by Trevor Armbrister*	
Assault on the Liberty *by James Ennes*	
For the President's Eyes Only: Secret Intelligence and the American Presidency from Washington to Bush *by Christopher M. Andrew*	
MacArthur's ULTRA: codebreaking and the war against Japan *by Edward J. Drea*	
Double-edged secrets: US naval intelligence operations in the Pacific during World War II *by W. J. Holmes*	
Seizing the enigma: the race to break the German U-boat codes *by David Kahn*	
And I was there: Pearl Harbor and Midway--breaking the secrets *by Edwin T. Layton*	
The Hut Six story: breaking the Enigma code *by Gordon Welchman*	
Computer cryptology: beyond decoder rings *by Karl Andreassen*	
Behind the battle: intelligence in the war with Germany *by Ralph Bennett*	
Hitler's Japanese confidant: General Oshima Hiroshima and MAGIC intelligence *by Carl Boyd*	
Codebreakers: the inside story of Bletchley Park *by F. H. Hinsley*	
Blind Man's Bluff: The Untold Story of American Submarine Espionage *by Sherry Sontag and Christopher Drew*	

Note: Prior to considering any pursuit of off duty education or program enrollment contact the Navy College Virtual Education Center (NCVEC) or visit your Overseas Navy College Office.

You must complete the Tuition Assistance Training before your first course will be approved.

Complete the online courses at the Navy College Website: http://www.navycollege.navy.mil/

How do I get started?

You already have. All your training up to this point is part of your Cryptologic Technician - Technical Roadmap. Now that you have made the first steps you will need to sit down and formulate a plan. This plan will work best if you start out discussing your options with your Leading Chief Petty Officer, Leading Petty Officer, Mentor, or Career Counselor. They will help you understand all of the basics. Then your next step is to contact the Navy College Virtual Education Center or visit your Overseas Navy College Office. Then your counselors will be able to help you formalize your plan and make sure that it makes sense for both you and the Navy. To aid you in your conversation with these professionals, here are a few questions that you may want to ask.

What credits do you have? What non-college courses have you taken? Where do you want to go? What field of study, or what kind of degree? What program will help me get there: Traditional or Online? What are my next steps: Transfer credits, take exams, have experience evaluated, or sign up for new courses?

RECOMMENDED OCCUPATIONAL-RELATED ASSOCIATE'S DEGREE FOR CTT

Recommended Associates' degrees for the Seaman
Arts – Business and Economics
Arts – Associate in Arts
Applied Science – Applied Computer Studies
Science – Business Studies
Computer Engineering
Computer Software
Computer Networking and Security Management
Computer Science
Computer Information Systems
Computer Network Technology
Computer Programming
Computer Science Technology
Computer Systems Analysis
Industrial Management Technology
Arts - Information Systems
Information Technology
Networking Security Management
Computer Programming and Analysis
Computer and Information Science
General Studies
Arts – Liberal Arts
Science – Liberal Arts
Sciences
Science (Computer and Information Systems/Network Security
Science (Electronic Engineering Tech)

RECOMMENDED OCCUPATIONAL-RELATED BACCALAUREATE/MASTERS DEGREE FOR CTT

Recommended Bachelors/Masters degrees for the Seaman
Information Systems Management
Computer Information Science
Computer Science
Computer Information Systems
Computer Engineering
Software Engineering
Computer Forensics
Computer Networking
Information Assurance
Information Systems Security
Information Technology
Network Management
Network Security

The Navy College Program & Web Page:

The Navy College Program (NCP) provides opportunities to Sailors to earn college degrees by providing academic credit for Navy training, work experience, and off-duty education. The NCP mission is to enable Sailors to obtain a college degree while on active duty. In support of the four R's - Recruiting, Readiness, Retention, and Respect - the NCP signifies Navy's commitment to education by improving enlistment appeal; demonstrating Navy service and achieving a college degree are compatible; helping Sailors apply themselves to new situations and challenges and better preparing them for advancement; building up Sailors' self-image; and producing higher quality Sailors.

- More information is available online at: https://www.navycollege.navy.mil

Tuition Assistance (TA):

NAVADMIN 114/19 limit changes as of 1 October 2019: TA provides funds for eligible active-duty personnel to attend approved educational institutions on an off-duty basis to earn a high school diploma, vocational/technical certificate, or college degree. TA pays for tuition. TA will pay for the following amount per career: 120 semester hours, or 180-quarter hours or 1800 clock hours or a combination of semester, quarter and clock hours. TA will pay the following amounts per fiscal year: 12 semester hours, not to exceed $250/credit for semester hours or 18-quarter hours not-to-exceed $166.67/credit for quarter hours or, 180 clock hours not-to-exceed $16.67/clock hours or a combination of semester, quarter and clock hours.

- More information is available online at: https://www.navycollege.navy.mil

Joint Service Transcripts (JST)

JSTs are official military transcripts which are used by colleges to validate your actual credited training. Every Sailor has a transcript already and access to it is free.

- More information is available online at: https://jst.doded.mil/

The American Council on Education (ACE)

ACE has reviewed every course listed in the OCCUPATIONAL Roadmap and determined what type of collegiate level credit is recommended. The ACE identifier, listed with each course, is a source to validate the information and to check for changes as they occur.

- Updates can be found at http://www.acenet.edu/news-room/Pages/Military-Guide-Online.aspx.

Vocational Certificates

Vocational Certificates are available from most community colleges. Most of your military training can be counted toward their degree programs, but they will still require residency credits and approximately 40-75 credit hours. These certificates can be as valuable as the apprenticeship program in the civilian work force.

College credits by Testing CLEP, DSST

Testing can replace the requirement to attend most of the college courses listed in the Occupational Roadmap. Base Education Centers offer CLEP and DSST exams for active duty military at no cost. They also offer a comprehensive list of "credit-by-exam" tests. Additionally, many of the tests have study guides available. These tests are available at the base education center or through the base library system. For specific testing locations visit the DANTES website.

- Navy College Program: https://www.navycollege.navy.mil/information-for-sailors/pre-college-testing-and-college-credit.htm
- DANTES: http://www.dantes.doded.mil/examinations/earn-college-credit/earn-college-credit.html

College Entrance Exams Testing ACT, SAT

The ACT and SAT are both standardized tests that help colleges evaluate candidates. Many colleges require that students submit test results as part of the admission application process. Since Sailors are considered transfer students, these tests are not generally required for admission. However, some Sailors must take the tests to enter specific military programs.

- Navy College Program (ACT SAT): http://www.navycollege.navy.mil/information-for-sailors/college-entrance-exams.htm
- DANTES (ACT SAT): http://www.dantes.doded.mil/examinations/college-admissions/act.html

SAMPLE DEGREE PLAN

A.S. INDUSTRIAL MANAGEMENT TECHNOLOGY

RATING:

Other Degree Requirements: *Remediation / SLS / Pre-reqs if Needed*
Residency: 25% coursework must be completed at FCCJ (in-class or DL).

~ School Degree Information ~

COURSE NUMBER/TITLE	CREDITS NEEDED	SERVICE SCHOOL	MOS	CLEP	DSST	EXCELSIOR	DL	SOC CRS. Cat.#
~GENERAL EDUCATION								
ENC 1101 - English Composition I	3		-	ENC1101	-	ENC1101	Y	EN024A
Social Science	3		-	Y	Y	Y	Y	TBD
Mathematics	3		-	Y	Y	-	Y	TBD
Humanities	3		-	Y	Y	-	Y	TBD
Natural Science	3		-	Y	Y	Y	Y	TBD
~PROFESSIONAL COURSES								
MAN 2021 - Principles of Management	3	E7-E9		MAN2021			Y	MG101A
BCN2732: OSHA Safety	3						N	ET069A
GEB 1011 - Introduction to Business	3				GEB1011		Y	BU001A
OST1581:Professional Development in the Work Environment	3						Y	
MAN2125:Supervision & Performance Improvement	3						Y	
ENC2210: Technical Report Writing	3						Y	EN032A
CGS 1100 - Microcomputer Applications	3	E6-E9					Y	OF033A
~PROFESSIONAL ELECTIVES - minimum 24 hours								
	E3	E4	E5	E6	E7	E8	E9	
ACE Recommended from MOS / Rate:								
Military Credits	7	13	13	17	16	16	16	
Credit from Service School:								
Recruit Training	2	2	2	2	2	2	2	
A-School (if attended)								
C-Schools (if attended)	Credit based on individual evaluation							
Total Elective Hours---------------------------	9	15	15	19	18	18	18	
Total Credits Awarded *	9	15	15	22	24	24	24	
TOTAL CREDITS NEEDED (60 s.h.)	51	45	45	38	36	36	36	

* Disclaimer: Please be aware that this is a sample and a Sailor's actual credit awarded may vary depending on the ACE recommendation in effect at the time of their training. This is an unofficial preview of how credit from prior learning and military experience may be applied toward this degree option. It is subject to change upon official evaluation by Florida Community College, Military Education Institute (800) 700-2795, military@fccj.edu.

Navy Enlisted Learning and Development Programs:

- Learning and Development Roadmap for Enlisted Sailors, OPNAVINST 1500.77(series)
- Navy Enlisted Retention and Career Development Program, OPNAVINST 1040.11(series)
- Career Counselor Handbook, NAVPERS 15878L
- Command Sponsor and Indoctrination Programs OPNAVINST 1740.3(series) (Sponsor assigned within 10 days of orders received / Indoctrination completed as soon as possible and practicable but NLT 90 days)
- Command Sponsorship of Dependents at Overseas Duty Stations MILPERSMAN 1300-150 to 1300-210
- Navy Enlisted Warfare Qualification Programs OPNAVINST 1414.9 (series)
- Master Training Specialists (MTS) Program NETCINST 1500.2(series)
- Command Master Chief Program OPNAVINST 1306.2 (series)

Reenlistments and Extensions:

- Agreement of Enlisted Naval Reservist, and Fleet Reservists Inductees to Remain on Active Duty MILPERSMAN 1160-060
- Extension of Enlistments MILPERSMAN 1160-040
- Overseas Tour Extension Incentives Program (OTEIP) MILPERSMAN 1306-300
- Consecutive Overseas Tours (COT) Leave Travel Entitlement Policy MILPERSMAN 1050-410
- Career WayPoints - Reenlistment MILPERSMAN 1160-140
- Reenlistment Ceremony MILPERSMAN 1160-020
- Leave of Military Personnel MILPERSMAN 1050-040
- Required Counseling Upon Enlistment and Reenlistment MILPERSMAN 1160-031
- Selective Reenlistment Bonus (Use Latest SRB NAVADMIN)
- Selective Training and Reenlistment (STAR) Program MILPERSMAN 1160-100
- Assignment to School as a Reenlistment Incentive MILPERSMAN 1306-1006
- Reserve Enlisted Incentives RESPERSMAN 1100-020 and current ALNAVRESFOR Message
- Reenlistments and Extensions for Sailors in a Drilling Status RESPERSMAN 1160-010
- Satisfactory Participation in the Navy Reserve RESPERSMAN 1001-010

Fleet Reserve and Retirements:

- Casualties and Survivor Benefits (SBP) MILPERSMAN 1770-010 to 1770-280 OPNAVINST 1750.5(Series)
- Disability Retirement MILPERSMAN 1850-010 to 1850-040
- Fleet Reserve and Retirement MILPERSMAN 1800-010 to 1800-070
- Privately Owned Vehicle (POV) Shipment Entitlement Policy and Household Goods (HHG) Shipment and Storage Entitlement Policy MILPERSMAN 4050-010 to 4050-020
- Permissive Temporary Duty (PTDY) Authorization for Job/House Hunting MILPERSMAN 1320-220
- Transition Assistance Program (TAP) OPNAVINST 1900.2(series) (Initiate a DD-2648E-1 NLT 90 Days Prior to Separation and attend workshop 12 months prior to separation/Fleet Reserve/Retirement date)

Enlisted Administrative Separations:

- Separation by Reason of Alcohol Rehabilitation Failure MILPERSMAN 1910-152
- Separation by Reason of Misconduct -Drug Abuse MILPERSMAN 1910-146
- Separation by Reason of Convenience of the Government -Early release to further education MILPERSMAN 1910-108
- Administrative Separation (ADSEP) Policy and General Information MILPERSMAN 1910-010 to 1910-812
- Fraudulent Enlistment MILPERSMAN 1910-134
- High Year Tenure (HYT) MILPERSMAN 1160-120
- Misconduct (various reasons) MILPERSMAN 1910-138/140/142
- Department of the Navy (DON) Policy on Parenthood and Pregnancy SECNAVINST 1000.10(series) & MILPERSMAN 1910-124
- Separation by Reason of Convenience of the Government -Personality Disorder MILPERSMAN 1910-122
- Separation by Reason of Physical Fitness Assessment (PA) Failure MILPERSMAN 1910-170
- Separation by Reason of Misconduct - Commission of a Serious Offense MILPERSMAN 1910-142
- Separation by Reason of Unsatisfactory Performance MILPERSMAN 1910-156

Advancement & Service Schools:

- Advancement Manual for Enlisted Personnel of the U.S. Navy and U.S. Navy Reserve BUPERSINST 1430.16(series)
- Accelerated Advancement of Recruit Training Class "A" School Graduates, and Ceremonial Guard MILPERSMAN 1430-010
- Enlisted to Officer Commissioning Program Application & Administration Manual OPNAVINST 1420.1(series)
- Service Schools MILPERSMAN 1306-600/602/604/608
- Class "A" School & Rating Entry Requirements MILPERSMAN 1306-618
- Retesting with Armed Forces Classification Test (AFCT) version of the Armed Services Vocational Aptitude Battery (ASVAB) MILPERSMAN 1236-010
- Professional Apprenticeship Tracks Program (PACT) NAVADMIN 318/07
- Prior Service Reenlistment Eligibility – Reserve (PRISE-R) MILPERSMAN 1133-061

Education Advancement & Service Schools:

- Joint Chiefs Professional Military Education (PME) Manual 1805.01
- Voluntary Education (VOLED) for Navy Sailors OPNAVINST 1560.9(series)
- Navy Voluntary Education Program NETCINST 1560.3(series)
- Navy Credentialing Programs OPNAVINST 1540.56
- Administration of the United Services Military Apprenticeship Programs (USMAP) OPNAVINST 1560.10(series)

Diversity, Equity and Inclusion, and Anti-Extremism:

- Diversity, Equity and Inclusion: https://diversity.defense.gov
- DOD Diversity and inclusion Management Program DODI 1020.05(series)

Other Quick References:

- Awards Manual (SECNAVINST 1650.1(Series)
- Change in Rating MILPERSMAN 1440-010 to 1440-040
- Department of the Navy Correspondence Manual (SECNAV M-5216.5
- Navy Alcohol and Drug Abuse Prevention and Control OPNAVINST 5350.4(series)
- Exchange of Duty (SWAPS) MILPERSMAN 1306-700
- First-Term Personnel Assignment Policy MILPERSMAN 1306-126
- Individual Augmentation (IA) Policy and Procedures OPNAVINST 1001.24(series)
- Military Couple and Single Parent Assignment Policy MILPERSMAN 1300-1000
- Military Pay MILPERSMAN 7220-010 to 7220-410
- Navy Performance Evaluation System BUPERSINST 1610.10 (Series)
- Overseas Extensions MILPERSMAN 1300-310
- Physical Readiness Program OPNAVINST 6110.1(series) / MILPERSMAN 6100-6199
- Reassignment for Humanitarian Reasons (HUMS) MILPERSMAN 1300-500
- Standardized Policy and Procedures for the Active Duty for Operational Support (ADOS) Programs OPNAVINST 1001.20 (series)
- Operational Risk Management OPNAVINST 3500.39C
- Personnel Qualification Standards (PQS) Catalog NAVEDTRA 43100-6M
- Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards NAVPERS 18068F Volume 1 & 2